



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/569,484

12/14/2006

Joerg Eickemeyer

P29283

3437

7055 7590 03/20/2008
GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

BONK, TERESA

ART UNIT

PAPER NUMBER

3725

NOTIFICATION DATE

DELIVERY MODE

03/20/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No. 10/569,484	Applicant(s) EICKEMEYER ET AL.	
	Examiner TERESA BONK	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/14/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 9 is a duplicate of claim 7 and claim 10 is a duplicate of claim 8. Applicant is required to cancel claims 9 and 10 or amend the claims to make them further limiting.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6 and 12-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The subject matter not fully described in the specification is the “not including intermediate treatment of the wire.” The omitted “intermediate treatment” is mentioned on the following pages: page 4, third paragraph, page 5, second paragraph and page 9, last paragraph. One skilled in the art would not know what the intermediate treatment is referring to. On page 7, line 27, "an intermediate annealing" step is disclosed as a required step.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3725

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regards to lines 8 and 9 of claim 1, “the wire” is indefinite. This particular disclosure of the product appears to leave out the alternative, “a strip” as disclosed on line 7 of the claim. Also, it also appears to be referring to the intermediate wire product that is drawn before the further processing steps.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandigo et al. (US Patent 5,106,825) in view of Masumoto et al. (US Patent 4,495,691) and Zelin et al. (US Patent 6,715,331), as best understood. Mandigo et al. discloses a method for producing a product with a cube texture (Column 1, lines 15-16) comprising processing a material based on copper into a wire having essentially circular cross section by a cold drawing method and then further processing the wire by an annealing method (Column 4, lines 33-41).

Mandigo et al. discloses the invention substantially as claimed except for the cold drawing method achieving a total cross-sectional reduction $\epsilon \geq 75\%$ and the further processing by further forming into a flat wire having a width that can be adjusted in a defined manner.

Masumoto et al. discloses drawing metallic wire (Nickel, gold and copper, Column 4, lines 24-28) through a die achieving a total cross-sectional reduction $\epsilon \geq 75\%$ (Column 6, lines 20-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reach the particularly claimed reduction percentage in order to “permit a significant increase of the uniformity, and furthermore, significantly increases the breaking strength, the degree of drawing at break, the Young’s modulus, and the toughness... (to) higher than those before the drawing” (Column 6, lines 25-35).

Zelin et al. discloses a method of deforming metallic wire by drawing the wire, annealing the wire, and then further processing the wire by further forming (drawing, Column 5, 65+ - Column 6, lines 1-5). It is noted that the wire is considered to be a flat wire since the wire diameter ranges is reduced (Column 3, lines 54-56) and its width would be capable of being adjusted in a defined manner. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform a further forming processing in order to “reduce dynamic strain aging and surface residual stresses negatively impacting wire properties” (Column 3, lines 5-16).

6. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandigo et al. in view of Masumoto et al. and Zelin et al. in further in view of Hodsdon (US Patent 6,024,080), as best understood. The combination of Mandigo, Masumoto et al., and Zelin et al. discloses the invention substantially as claimed except for wherein the cold drawing method is carried out in respectively alternating drawing directions (reversibly). Hodsdon discloses a cold drawing method carried out in respectively alternating drawing directions (reversibly), Claim 3. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to enable the drawing method to have alternating drawing directions because combining prior art elements according to known methods yields predictable results.

7. Claims 3-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandigo et al. in view of Masumoto et al. and Zelin et al. in further in view of Dameron, Jr. et al. (US Patent 4,280,857) and Bertolini (US Patent 6,449,997), as best understood. The combination of Mandigo, Masumoto et al., and Zelin et al. discloses the invention substantially as claimed except for wherein the cold drawing method is implemented as slip drawing by drawing dies having drawing angles $2\alpha \leq 12^\circ$.

Dameron, Jr. et al. discloses a drawing and annealing system that uses a conventional slip drawing machine, Column 2, lines 20-22. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the cold drawing method as slip drawing because “such an operation is highly efficient and economical” (Column 2, lines 34-35).

Bertolini discloses cold drawing wire implemented by drawing dies having drawing angle of $2\alpha \leq 12$ (Column 2, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the particular drawing angles because applying a known technique to a known device ready for improvement to yield predictable results.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERESA BONK whose telephone number is 571-272-1901. The examiner can normally be reached on M-F 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Derris H Banks/
Supervisory Patent Examiner, Art Unit 3725

Teresa M. Bonk
Examiner
Art Unit 3725